

CLAIMS

1. Quick-coupling and quick-release connector for piping, comprising two tubular fitting parts (1, 2) fastenable to respective pipes (3, 4) to be coupled and quick-coupling and quick release means (15) for said fitting parts (1, 2), said quick-coupling and quick release means (15) comprising a plurality of locking segments (16) circumferentially distributed in a plane perpendicular to the axis of said fitting parts (1, 2) and housed in radially movable way in respective radial slots (17) of an axial projecting portion (6) of a first fitting part (2) that, during the coupling stage, is superimposable to a corresponding projecting axial portion (5) of the second fitting part (1), a revolving ring (18) controllable to rotate around the projecting portion (6) of the first fitting part (2) in order to work on said locking segments (16) so as to push them into at least one radial seat (33) of said projecting portion (5) of the second fitting part (1) or to house them in their own radial seats (34), respectively for the coupling and the uncoupling of said fitting parts (1, 2) and a hydraulic cylinder (19) reacting between said first fitting part (2) and said revolving ring (18), characterised in that it comprises an additional independent by operable hydraulic cylinder (19) arranged substantially at 180° from the first one in the rotation plane of the revolving ring (18), each one of said hydraulic cylinders (19) being arranged so as to react between a first lever (22) fastened to said first fitting part (2) and a second lever (23) fastened to the revolving ring (18), said first lever (22) being made up of a radially more external part (24) and of a radially more internal part (25) connected with each other by an articulation (26) which is modifiable in order to be able to assume two different operating conditions, one for the complete mutual locking of the two parts (24, 25) of the first lever (22) and the other one of consent for the rotation of the radially more external part (24) of the first lever (22) in direction of approach to the second lever (23).

2. Connector according to claim 1, characterised in that the radially more internal part (25) of the first lever (22) is provided with a shoulder (39)

against which the more external part (24) of the first lever (22) can abut in order to prevent the rotation of said more external part (24) in direction of movement away from said second lever (23).

5 3. Connector according to claim 1, characterised in that said modifiable articulation (26) is made up of a hingement pin (27) and of a gudgeon (28) insertable in lined up holes (29, 30) of the two parts (24, 25) of the first lever (22) when in the coupling stage and disinsertable from them when in the uncoupling stage.

10